

Overview of the Incidence of Scabies Factors in the Work Area of the Public Health Center Tanjung Medan, Kampung Rakyat District

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Abstract

In developing nations, scabies is one of the most prevalent diseases. Scabies will be closely associated with issues with environmental sanitation.The areas where people living with scabies disease are prone to frequent flooding when it rains, because people live along rivers and are also densely populated, so this has resulted in a high number of cases of scabies.This study was conducted to determine the description of the incidence of scabies in the working area of the Public Health Center Tanjung Medan, Kampung Rakyat District. This study uses qualitative methods. The research informants were selected by using purposive sampling method. The criteria for the informants in this study were people who had or are currently suffering from scabies skin disease. Data were collected by in-depth interviews.The results showed the factors that influence the incidence of scabies such as personal hygiene, environmental sanitation, nutritional status, symptoms of scabies experienced, and health services at the Public Health Center Tanjung Medan . In the aspect of personal hygiene, it is known how the informants' daily activities in carrying out personal hygiene. The personal hygiene of the community and, the environmental sanitation around the place where the community lives is still not good. It is also known that a poor diet has made supporting factors for the development of scabies continue to occur, in the community, so that people continue to experience symptoms such as itching and the appearance of red spots on the skin.

Keyword: Disease, Environmental,Sanitation, Scabies

INTRODUCTION

This skin ailment is caused by the mite Sarcoptes scabies var humans... Sarcoptes scabiei is a member of the Arthropoda, Arachnida, Acarina, and Sarcoptidae families (Husna et al., 2021). *Scabies* is a skin illness that may be transferred directly and indirectly (through things), such as via the sharing of clothing and towels with other family members or persons who have scabies (Mutiara & Syailindra, 2016). Scabies is also known as budukan, Gudikan, the itch, Agogo itch, and seven-year itch (Affandi, 2019).

Scabies is characterized by intense nighttime itching. The mite holes appear as up to 2.5 cm long undulating lines with short ends (Ridwan, 2017). Those infected with scabies

often experience itching between the fingers, wrists, elbows, armpits, around the nipples of female breasts, male genitals, in the area of the belt line and lower buttocks, and the region of the belt line and lower buttocks (Mading & Indriaty, 2015). Due to mites (scabies lice) beneath the skin, patients cannot resist scratching at all times (Ridwan, Sahrudin, 2017).

Several factors are associated with the number of scabies cases, including the low socioeconomic status of the population and poor personal hygiene, as well as an environment that promotes the development of scabies infection, such as high room occupancy rates and lack thereof of access to clean water, and inadequate sanitation (Arivananthan, 2016). The spread of scabies is facilitated by a high population density combined with intimate interpersonal contact. Comparatively to other risk factors for scabies, the number of occupants per dwelling is the most important. Based on these risk factors, scabies is often prevalent in orphanages, dorms, boarding schools, jails, and refugee camps (Ratnasari, 2014).

According to the International Alliance for the Control of Scabies (IACS), the incidence rate of scabies in 2014 ranged from 0.3% to 46% in contemporary research (Paramita & Sawitri, 2015). In 2010, it was estimated that the direct consequences of scabies attacks on the skin alone caused about 1.5 million YLDS (years lived with disability), and the indirect effects of problems on renal and cardiovascular function were much larger (Hafner, 2009). According to a 2015 research done in Egypt, the frequency of scabies among kids in the area analyzed was 4.4%. According to two separate studies, the frequency of scabies was 4.8% among schoolchildren in Ibadan, Nigeria, and 3% among patients of a pediatric dermatology clinic in Kuwait (Salah Hegab et al., 2015).

Scabies, which had started to be eradicated in Indonesia and other nations, is currently seeing a resurgence in instances and has begun to spread in other parts of Indonesia. The frequency of scabies in Indonesia declined from 6-13% in 2008 to 4-6% in 2013, according to the Ministry of Health of the Republic of Indonesia, using data from health facilities across Indonesia (Kementerian Kesehatan RI, 2018). However, geography also affects the occurrence of scabies, which is higher in settings where many people live together, such as boarding schools, dorms, and orphanages. According to research, the frequency of scabies in Pondok Pesantren Muqimus Sunah and Rhaudatul Ulum South Sumatra was 56.5% and 59.6%, respectively (Miftahurrizqiyah,2020).

According to a study done between 2016 and 2018 at the Skin and Gender Poli at Meuraxa Hospital in Banda Aceh, most patients with scabies skin condition are male, including 276 of 395 respondents (69.9%). In addition, incidences of scabies sickness have

reduced from 2017 to 2018 at Meuraxa Hospital in Banda Aceh. (Muat Muliana, Cut Ana, dan Rizki ,2020)

According to health profile data for the work area of the Tanjung Medan Health Center in the Kampung Rakyat District of South Labuhanbatu (June 2019-June, 2020), there are 352 occurrences of scabies. According to one of the health workers at this health center, the area where people with scabies reside is vulnerable. When it rains, flooding frequently occurs because people live on the river's edge and are also densely populated. As a result, there are many cases of scabies in the work area of the Tanjung Medan Health Center in the Kampung Rakyat District of Labuhanbatu Selatan.

METHODS

This study employs qualitative approaches. This study was done in Tanjung Medan, Kampung Rakyat subdistrict, Labuhan Batu Selatan. Purposive sampling was used to choose the research participants. People who have experienced or are suffering from scabies skin illness and are willing to participate as research informants meet the requirements for this study. In the working area of the Tanjung Medan Health Center in the Kampung Rakyat Subdistrict, five scabies-affected or scabies-suffering informants comprised the study sample. The date on which this investigation was conducted was August 5, 2020. Utilizing secondary data gathered from patient visit data at the Tanjung Medan Health Center in the Kampung Rakyat District, the data gathering approach was based on secondary data. In addition to utilizing primary data collected via in-depth interviews. This study's dependent variable is the incidence of scabies, whereas its independent factors include personal hygiene, home environmental cleanliness, nutritional status, scabies symptoms, and services of the public health center.

RESULTS

Most people in Tanjung Medan Village work as farmers, totaling 1,657 people, 651 as employees, 420 as artisans, 305 as teachers, 286 as civil servants, and 173 as self-employed people.

Religion and Customs

The religion practiced by the community in Tanjung Medan village is mostly Islam which 5,546 people; 330 people adhere to the Protestant religion, and 53 people adhere to the Catholic religion.

The author concludes that the customs that still exist among the residents of Tanjung Medan village, Kampung Rakyat sub-district, Labuhanbatu Selatan Regency are: Malay, Batak Mandailing, and Javanese. Of the customs that exist in Tanjung Medan Village, Kampung Rakyat Subdistrict, Labuhanbatu Selatan Regency. The most dominating is the Mandailing Batak tribe community because from the first Mandailing Batak tribe people who originally reside in this area.

Informant Characteristics

The informants in this study consisted of five people: one informant aged seven years, two informants aged 21 years, one informant aged 15 years, and one informant aged 13 years. For the last education, two informants completed their education up to the equivalent of Senior High School (SMA), two informants are still in Elementary School (SD), and one informant is still a Junior High School student (SMP).

Table 1. Characteristics of Research Informants.

No.	Name Initials	Age	Last Education	Gender
1	AAR	21	SMA	Male
2	JPG	7	SD	Female
3	SAR	15	SMP	Female
4	RA	13	SD	Female
5	Id	21	SMA	Female

DISCUSSION

Based on interviews with research informants who are people who have had scabies, they bathe twice and use the same soap as other family members. Meanwhile, the water used to wash clothes and towels needs to be more suitable.

More details such as the contents of the following informant's expression:

"Usually use water from the river to wash clothes. The detergent used is usually washing powder." (JPG, Female, 7 years old)

"The water in my house is murky and smells of rust because it is the only water available, so I use it for washing. But not for cooking and drinking. The detergent used is usually washing powder" (SAR, Female, 15 Years)

Additionally, it was discovered that all five informants shared towels with other family members. After showering, all five informants changed their clothing. Two of the five informants did not dry their garments and towels in the sun, and all of the informants often used moist towels.

Soap is an item that is often used by informants to clean themselves, which may result in the spread of scabies via indirect contact (Parman, 2017). Towels worn alternatively with other family members and not dried in the sun might enhance the activity of Sarcoptes scabies mites on the towel, allowing mites from towels used by scabies-affected family members to spread to healthy family members (Dewi & Wathoni, 2018). The increased activity of Sarcoptes scabies mites on towels that have been washed in unclean water and then utilized may be attributed to the alternating usage of towels. Towels are one of the things that might indirectly transfer scabies. It is more difficult for Sarcoptes scabies mites to infest persons who wash often and constantly use clean towels (Efendi et al., 2020); (Sa'adatin, 2015).

Personal Hygiene is a preventative technique that requires individual accountability to enhance health and minimize the spread of infectious illnesses, particularly those transmitted via direct contact (Hilma & Ghazali, 2014);(Triani, 2017). A person has excellent personal Hygiene if he or she can maintain the cleanliness of his or her body, including the skin, nails, hair, mouth and teeth, clothes, eyes, nose, ears, genitals, towels, and bedding(Priyanto, 2018); (Sabit, 2015). A person with poor personal cleanliness is more likely to get scabies than an individual with adequate personal Hygiene (Afienna, 2018).

Environmental Sanitation

Based on the results of interviews with research informants, who have suffered from scabies, they have ventilation in their respective rooms, and of the five informants, two sleep in their rooms alone.

"The room has ventilation, like a window, and I sleep alone in the room." (AAR, Male, 21 Years)

"There is one vent in my room, and I always sleep alone in my room" (ID, Female, 21 Years)

It is also known that all informants use blankets and bed linen alternately with other family members, and one informant only changes his bed linen and blankets once a month.

"Bed sheets and blankets are used alternately, I sleep alone, but my family often enters the room. Well, bed sheets are changed once a month if the blanket is sometimes once a month too." (AAR, Laki-Laki, 21 Tahun)

All informants take care of and clean their rooms by sweeping them every day. Of the five informants, one had poor ventilation and lighting.

"In my house, the lighting and ventilation are not good, the windows are few and small."(SAR, Female, 15 Years)

Information was also obtained from 3 research informants that the water used for their daily needs was not good and not suitable for consumption.

"The water meets the needs, although it is a little yellow and smells a bit..." (AAR, Male, 21 Years)

"The water in my house comes from the river, but for drinking water, we buy refilled gallon of water and boil it again."(JPG, Female, 7 Years)

"The water in my house is murky and smells of rust. The clean water available for daily life still needs to be improved." (SAR, Female, 15 Years)

Environmental sanitation is preserving health by regulating external environmental elements to prevent sickness. Environmental cleanliness has a crucial influence on scabies, which is dominantly caused by an unhealthy environment (Imartha et al., 2017). The environment may make it simpler for Sarcopter scabies mites to travel from reservoirs to nearby items, occupying new hosts and potentially inducing transmission to others. Environmental sanitation risk variables closely associated with scabies include temperature, illumination, ventilation, humidity, and clean water availability (Farihah Ummu, 2017); (Siregar, 2022a).

Nutritional Needs, Scabies Symptoms, and Health Center Health Services

Several studies have found that factors influencing the incidence of scabies include personal hygiene, level of knowledge, and nutritional status (M et al., 2018). Research done by Pande Mira and Gusti Ayu in 2019 discovered that scabies patients were dominated by kid responders whose nutritional status was poor; this was also associated with low economic status making it difficult to access highly nutritious meals. However, these characteristics do not have a tangible link with the incidence of scabies but have the potential to be connected with clinical aspects (Mira, 2019).

Based on the findings of interviews with informants who have had and are presently suffering from scabies, it is known that all informants still have a bad diet, consuming fish often but fruits and vegetables seldom. Some informants often consume fast food.

"I eat fish almost every day, but rarely eat vegetables, let alone fruit" (AAR, Male, 21 Years).

"I often eat instant noodles and fried eggs" (SAR, Female, 15 Years).

It is also known that most informants have a daily practice of consuming eight glasses of water, although all informants said they seldom consume milk. Some informants stated they could drink more than eight glasses of water per day, and others indicated they drank fewer than eight glasses per day.

"*I drink 8 glasses a day, but I rarely consume milk" (SAR, Female, 15 Years).*

"I don't drink up to 8 glasses of water a day, let alone milk, I drink milk every day" (RA, Female, 13 Years)

Based on the interview findings, it was also determined that the informant had multiple severe scabies symptoms. The most common symptoms of scabies are nighttime itching, rashes and blisters on the skin, the emergence of tiny patches or pustules on the skin, and sometimes, crusts on the skin. The majority of respondents said that they often experienced itching and the emergence of red patches on the skin. Additionally, some people endure these symptoms for months. In addition, there are symptoms in the form of wet, crimson patches.

"The symptoms are like a rash and spots on the skin until monthly, and it feels very itchy. The midwife treated me, but it had not healed yet, I went to the doctor, and the rash started to dry up." (JPG, Female, 7 Years)

"There are spots around the fingers and the spots are watery" (RA, Female, 13 Years.)

It was also shown that many individuals with scabies do not visit a health facility or hospital for different reasons. Many individuals continue to believe that scabies is a common ailment, oblivious that health issues may become chronic and hazardous. According to the interview findings, three informants have never had their scabies evaluated at either Puskesmas or Hospital.

"I don't go to the health center when I have scabies symptoms" (Id, Female, 21 Years)

"even though I feel itchy I don't go to the health center". (AAR. Male. 21 Years).

Based on the findings of the interview, it was determined that the health services at the Puskesmas were fairly excellent since there was medical staff available 24 hours a day, a pharmacy inside the Puskesmas, and services that were accessible to all community members. However, all interviewees said that the Puskesmas of the hamlet of Tanjung Medan had never provided scabies therapy in the community where they worked.

"Yes, when I first got sick, I went to the health center; because I did not recover, I went to the midwife and the doctor. The service at the health center is good, but there is no counseling about scabies". (JPG, female, 7 years)

"Yes. the service at the health center in my area is good, and the health center is on duty for up to 24 hours". (SAR, female, 15 years).

Fruit is unavailable in all orphanages, so children cannot eat it. The price of vegetables is low enough for both orphanages to purchase them, so kids choose to eat them every day. For consuming instant noodles more than three times a week, respondents always consume instant noodles, and for consuming junk food or instant food for less than three weeks, once the children consume junk food, it is a matter of cost that they cannot afford to order food every day (Siregar, 2022b).

CONCLUSIONS

Based on the results and discussion of the research above, it can be concluded that:

1. The personal hygiene of the community could be better or can be said to be bad because many people still use towels in a damp state.
2. Environmental sanitation around the house needs to be improved because many people use blankets and bed linen together, and clean water in their homes is insufficient.
3. People in this area rarely eat vegetables; they often consume fish and instant food.
4. The symptoms of scabies that are always experienced are spots and rashes on the skin and itching, especially at night.
5. The local health center services are good and easily accessible to the community, but the health center has never held counseling on scabies.

Based on the above conclusions, several suggestions are proposed which can be input, among others:

1. People must be able to improve their hygiene in everyday life because someone with poor personal hygiene has a greater risk of contracting scabies than someone with good personal hygiene.

2. Environmental sanitation around the informant's house and other communities must be improved, such as not using the same bed linen and blankets as people with scabies, the house having sufficient ventilation and lighting, and clean water available because environmental sanitation factors associated with scabies include ventilation, lighting, temperature, humidity, and clean water supply.

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